Available online at www.sciencedirect.com
SCIENCE DIRECT®
Ultrasonics 43 (2005) 834–838
Ultrasonics
www.elsevier.com/locate/ultras

Author Index to Volume 43

Abdelwahab, A., see Meziri, M. 305
Adam, D., see Behar, V. 57
Adam, D., see Behar, V. 777
Aggelis, D.G., see Philippidis, T.P. 584
Alberola-López, C., see Martín-Fernández, M. 283
Albino, M., see Alippi, A. 1
Alippi, A., Albino, M., Angelici, M., Bettucci, A. and Germano, M.
Space distribution of harmonic mode vibration amplitudes in nonlinear finite piezoelectric transducer 1
Almqvist, M., see Lilliehorn, T. 293
Ameijeiras, I., see Buigas, M. 383
Angelici, M., see Alippi, A. 1
Apfel, A., Moysan, J., Corneloup, G., Fouquet, T. and Chassignole, B.
Coupling an ultrasonic propagation code with a model of the heterogeneity of multipass welds to simulate ultrasonic testing 447
Armati, R., see Wilm, M. 457

Bálek, R., see Šlegrová, Z. 315
Ballandras, S., see Wilm, M. 457
Basir, O.A., see Zhao, B. 375
Basset, O., see Davignon, F. 789
Behar, V., Adam, D., Lysyansky, P. and Friedman, Z.
Improving motion estimation by accounting for local image distortion 57
Behar, V. and Adam, D.
Optimization of sparse synthetic transmit aperture imaging with coded excitation and frequency division 777
Berezina, S., Zinin, P.V., Schneider, D., Fei, D. and Rebinsky, D.A.
Combining Brillouin spectroscopy and laser-SAW technique for elastic property characterization of thick DLC films 87
Berriman, J., Purnell, P., Hutchins, D.A. and Neild, A.
Humidity and aggregate content correction factors for air-coupled ultrasonic evaluation of concrete 211
Bettucci, A., see Alippi, A. 1
Biateau, C., see Madelin, G. 769
Billson, D.R., see Neild, A. 183
Binci, M., see Frangi, A. 747
Biwa, S., Suzuki, A. and Ohno, N.
Evaluation of interface wave velocity, reflection coefficients and interfacial stiffnesses of contacting surfaces 495
Biwa, S., Watanabe, Y., Motogi, S. and Ohno, N.
Analysis of ultrasonic attenuation in particle-reinforced plastics by a differential scheme 5
Blindt, R., see Chow, R. 227
Bloomfield, P.E.
Extensions of the scattering-object function and the pulser–receiver impulse response in the field II formalism 421
Boonsang, S. and Dewhurst, R.J.
Signal enhancement in Rayleigh wave interactions using a laser-ultrasound/EMAT imaging system 512
Bowen, C.R., see Ramesh, R. 173
Briers, R., see Declercq, N.F. 605
Bucur, V.
Ultrasonic techniques for nondestructive testing of standing trees 237
Buick, J.M., see Cosgrove, J.A. 21
Buigas, M., de Espinosa, F.M. Schmitz, G., Ameijeiras, I., Masegosa, P. and Domínguez, M.
Electro-acoustical characterization procedure for cMUTs 383

Calmon, P., see Haïat, G. 619
Campbell, D.M., see Cosgrove, J.A. 21
Campos-Pozuelo, C., see Vanhille, C. 652
Chang, K.-T.
A novel ultrasonic clutch using near-field acoustic levitation 49
Changliang, X. and Mengli, W.
Stability analysis of the rotor of ultrasonic motor driving fluid directly 596
Chassignole, B., see Apfel, A. 447
Chen, X. and Wan, M.
Parameter measurement of the cylindrically curved thin layer using low-frequency circumferential Lamb waves 357
Cheng, F.T., see Chiu, K.Y. 713
Chi, E., see Vaezy, S. 265
Chi, Z.R., see Huang, Q.H. 153
Chiu, K.Y., Cheng, F.T. and Man, H.C.
Evolution of surface roughness of some metallic materials in cavitation erosion 713
Chivers, R., see Chow, R. 227
Chow, R., Blindt, R., Chivers, R. and Povey, M.
A study on the primary and secondary nucleation of ice by power ultrasound 227
Chun, H.Y., see Kim, J.O. 531
Corigliano, A., see Frangi, A. 747
Cornejo, C., see Vaezy, S. 265
Corneloup, G., see Apfel, A. 447
Cosgrove, J.A., Buick, J.M., Campbell, D.M. and Greated, C.A.
Numerical simulation of particle motion in an ultrasound field using the lattice Boltzmann model 21
Costa, E.T., see Dantas, R.G. 405
Crespo, A., see Jiménez-Fernández, J. 643
Cretu, N.
Acoustic measurements and computational results on material specimens with harmonic variation of the cross section 547
Crum, L., see Vaezy, S. 265

Daniau, W., see Wilm, M. 457
Dantas, R.G., Costa, E.T. and Leeman, S.
Ultrasound speckle and equivalent scatterers 405
Daryoush, A., see Lewin, P.A. 815

doi:10.1016/S0041-624X(05)00092-2

Available online at www.sciencedirect.com
SCIENCE DIRECT®
Ultrasonics 43 (2005) 834–838
Ultrasonics
www.elsevier.com/locate/ultras

Author Index to Volume 43

Abdelwahab, A., see Meziri, M. 305
Adam, D., see Behar, V. 57
Adam, D., see Behar, V. 777
Aggelis, D.G., see Philippidis, T.P. 584
Alberola-López, C., see Martín-Fernández, M. 283
Albino, M., see Alippi, A. 1
Alippi, A., Albino, M., Angelici, M., Bettucci, A. and Germano, M.
Space distribution of harmonic mode vibration amplitudes in nonlinear finite piezoelectric transducer 1
Almqvist, M., see Lilliehorn, T. 293
Ameijeiras, I., see Buigas, M. 383
Angelici, M., see Alippi, A. 1
Apfel, A., Moysan, J., Corneloup, G., Fouquet, T. and Chassignole, B.
Coupling an ultrasonic propagation code with a model of the heterogeneity of multipass welds to simulate ultrasonic testing 447
Armati, R., see Wilm, M. 457

Bálek, R., see Šlegrová, Z. 315
Ballandras, S., see Wilm, M. 457
Basir, O.A., see Zhao, B. 375
Basset, O., see Davignon, F. 789
Behar, V., Adam, D., Lysyansky, P. and Friedman, Z.
Improving motion estimation by accounting for local image distortion 57
Behar, V. and Adam, D.
Optimization of sparse synthetic transmit aperture imaging with coded excitation and frequency division 777
Berezina, S., Zinin, P.V., Schneider, D., Fei, D. and Rebinsky, D.A.
Combining Brillouin spectroscopy and laser-SAW technique for elastic property characterization of thick DLC films 87
Berriman, J., Purnell, P., Hutchins, D.A. and Neild, A.
Humidity and aggregate content correction factors for air-coupled ultrasonic evaluation of concrete 211
Bettucci, A., see Alippi, A. 1
Biateau, C., see Madelin, G. 769
Billson, D.R., see Neild, A. 183
Binci, M., see Frangi, A. 747
Biwa, S., Suzuki, A. and Ohno, N.
Evaluation of interface wave velocity, reflection coefficients and interfacial stiffnesses of contacting surfaces 495
Biwa, S., Watanabe, Y., Motogi, S. and Ohno, N.
Analysis of ultrasonic attenuation in particle-reinforced plastics by a differential scheme 5
Blindt, R., see Chow, R. 227
Bloomfield, P.E.
Extensions of the scattering-object function and the pulser–receiver impulse response in the field II formalism 421
Boonsang, S. and Dewhurst, R.J.
Signal enhancement in Rayleigh wave interactions using a laser-ultrasound/EMAT imaging system 512
Bowen, C.R., see Ramesh, R. 173
Briers, R., see Declercq, N.F. 605
Bucur, V.
Ultrasonic techniques for nondestructive testing of standing trees 237
Buick, J.M., see Cosgrove, J.A. 21
Buigas, M., de Espinosa, F.M. Schmitz, G., Ameijeiras, I., Masegosa, P. and Domínguez, M.
Electro-acoustical characterization procedure for cMUTs 383

Calmon, P., see Haïat, G. 619
Campbell, D.M., see Cosgrove, J.A. 21
Campos-Pozuelo, C., see Vanhille, C. 652
Chang, K.-T.
A novel ultrasonic clutch using near-field acoustic levitation 49
Changliang, X. and Mengli, W.
Stability analysis of the rotor of ultrasonic motor driving fluid directly 596
Chassignole, B., see Apfel, A. 447
Chen, X. and Wan, M.
Parameter measurement of the cylindrically curved thin layer using low-frequency circumferential Lamb waves 357
Cheng, F.T., see Chiu, K.Y. 713
Chi, E., see Vaezy, S. 265
Chi, Z.R., see Huang, Q.H. 153
Chiu, K.Y., Cheng, F.T. and Man, H.C.
Evolution of surface roughness of some metallic materials in cavitation erosion 713
Chivers, R., see Chow, R. 227
Chow, R., Blindt, R., Chivers, R. and Povey, M.
A study on the primary and secondary nucleation of ice by power ultrasound 227
Chun, H.Y., see Kim, J.O. 531
Corigliano, A., see Frangi, A. 747
Cornejo, C., see Vaezy, S. 265
Corneloup, G., see Apfel, A. 447
Cosgrove, J.A., Buick, J.M., Campbell, D.M. and Greated, C.A.
Numerical simulation of particle motion in an ultrasound field using the lattice Boltzmann model 21
Costa, E.T., see Dantas, R.G. 405
Crespo, A., see Jiménez-Fernández, J. 643
Cretu, N.
Acoustic measurements and computational results on material specimens with harmonic variation of the cross section 547
Crum, L., see Vaezy, S. 265

Daniau, W., see Wilm, M. 457
Dantas, R.G., Costa, E.T. and Leeman, S.
Ultrasound speckle and equivalent scatterers 405
Daryoush, A., see Lewin, P.A. 815

doi:10.1016/S0041-624X(05)00092-2

Davignon, F., Deprez, J.-F. and Basset, O.
A parametric imaging approach for the segmentation of ultrasound data 789
Davis, L.A.J., see Neild, A. 183
de Billy, M. and Hladky-Hennion, A.C.
On the splitting of aspherical structure submitted to an acoustic polarized excitation 27
Declercq, N.F., Degrieck, J. and Leroy, O.
A useful analytical description of the coefficients in an inhomogeneous wave decomposition of a symmetrical bounded beam 279
Declercq, N.F., Degrieck, J. and Leroy, O.
On the theoretical possibility to apply an acoustic diffraction grating as a complex frequency filter device for electronic signals 764
Declercq, N.F., Degrieck, J. and Leroy, O.
Schlieren photography to study sound interaction with highly absorbing materials 505
Declercq, N.F., Degrieck, J., Briers, R. and Leroy, O.
Diffraction of homogeneous and inhomogeneous plane waves on a doubly corrugated liquid/solid interface 605
de Espinosa, F.M., see Buigas, M. 383
Degott, C., see Meziri, M. 305
Degrieck, J., see Declercq, N.F. 279
Degrieck, J., see Declercq, N.F. 505
Degrieck, J., see Declercq, N.F. 605
Degrieck, J., see Declercq, N.F. 764
Deneuville, F., see Petit, S. 802
Deprez, J.-F., see Davignon, F. 789
Desvaux, S., see Petit, S. 802
Dewhurst, R.J., see Boonsang, S. 512
Domínguez, M., see Buigas, M. 383
Dowson, S.P., see Theobald, P.D. 343
Dual, J., see Gsell, D. 123
Duquennoy, M., see Petit, S. 802

El-Sherif, M., see Lewin, P.A. 815
Elvira, L., see Resa, P. 247
Endo, N., see Saito, H. 524
Esward, T.J., see Theobald, P.D. 343

Fatemi, M., see Mitri, F.G. 435
Faure, P., see Frangi, A. 747
Fei, D., see Berezina, S. 87
Forsberg, F., Shi, W.T., Jadidian, B. and Winder, A.A.
Multi-frequency harmonic arrays: initial experience with a novel transducer concept for nonlinear contrast imaging 79
Fouquet, T., see Apfel, A. 447
Franconi, J.-M., see Madelin, G. 769
Frangi, A., Corigliano, A., Binci, M. and Faure, P.
Finite element modelling of a rotating piezoelectric ultrasonic motor 747
Friedman, Z., see Behar, V. 57

Gallego, R., see Rus, G. 391
Gausmann, R., see Yi, Y. 629
Gélat, P.N., Preston, R.C. and Hurrell, A.
A theoretical model describing the transfer characteristics of a membrane hydrophone and validation 331
Gélat, P.N., Zeqiri, B. and Hodnett, M.
A finite-element model of the aperture method for determining the effective radiating area of physiotherapy treatment heads 321
Germano, M., see Alippi, A. 1
Gomatam, J., see MacDonald, C.A. 113
Gómez-Ullate, Y., see Resa, P. 247
Goodenough, T.I.J., Rajendram, V.S., Meyer, S. and Prêtre, D.
Detection and quantification of insoluble particles by ultrasound spectroscopy 231
Goodenough, T.I.J., Rajendram, V.S., Meyer, S. and Prêtre, D.
Development of a multi frequency pulse diagnostic ultrasound device 165
Gopalakrishnan, S., see Roy Mahapatra, D. 736
Greated, C.A., see Cosgrove, J.A. 21
Grosse, C.U., see Kurz, J.H. 538
Gsell, D. and Dual, J.
Non-destructive evaluation of elastic material properties in anisotropic circular cylindrical structures 123
Gusev, V.E., see Zaitsev, V.Yu. 699

Haïat, G., Lhémery, A., Calmon, P. and Lasserre, F.
A model-based inverse method for positioning scatterers in a cladded component inspected by ultrasonic waves 619
Hinders, M.K., see Leonard, K.R. 574
Hindle, S.A., see Povey, M.J.W. 219
Hirasawa, M., see Komarov, S.V. 241
Hladky-Hennion, A.C., see de Billy, M. 27
Hodnett, M., see Gélat, P.N. 321
Hosten, B., see Madelin, G. 769
Hua, X., Kaiqing, L. and Zhenxi, Z.
A new algorithm for detecting fetal heart rate using ultrasound Doppler signals 399
Huang, C.-C., see Tsui, P.-H. 560
Huang, J.-S., see Ting, Y. 566
Huang, Q.H., Zheng, Y.P., Lu, M.H. and Chi, Z.R.
Development of a portable 3D ultrasound imaging system for musculoskeletal tissues 153
Hung, C., see Hung, J.-C. 692
Hung, J.-C. and Hung, C.
The influence of ultrasonic-vibration on hot upsetting of aluminum alloy 692
Hurrell, A., see Gélat, P.N. 331
Hutchins, D.A., see Neild, A. 183
Hutchins, D.A., see Berriman, J. 211

Jadidian, B., see Forsberg, F. 79
Jan Kowalski, S.
Ultrasonic waves in diluted and densified suspensions 101
Jar, H.-C., see Ting, Y. 566
Jiménez-Fernández, J. and Crespo, A.
Bubble oscillation and inertial cavitation in viscoelastic fluids 643
Jin, F., see Qian, Z. 822
Jin, J., Quek, S.T. and Wang, Q.
Design of interdigital transducers for crack detection in plates 481
Johansson, S., see Lilliehorn, T. 293
John, C.
Directing ultrasound at the cemento-enamel junction (CEJ) of human teeth: I. Asymmetry of ultrasonic path lengths 467
Joo, H.-W., Lee, C.-H. and Jung, H.-K.
Identification of the piezoelectric material coefficients using the finite element method with an asymptotic waveform evaluation 13
Jung, H.-K., see Joo, H.-W. 13

Kaiqing, L., see Hua, X. 399
Kara, H., see Ramesh, R. 173
Kawashima, K.
Measurement of velocity variations along a wave path in the through-thickness direction in a plate 135

Kennedy, J.D., see Povey, M.J.W. 219
Kim, J.O., Lee, J.G. and Chun, H.Y.
Radial vibration characteristics of spherical piezoelectric transducers 531
Kishimoto, K., see Qian, Z. 822
Komarov, S.V., Nemeth, S. and Hirasawa, M.
Acoustically assisted removal of nitrogen oxide from high temperature flue gas 241
Kun, G. and Wan, M.
A comparison of HIFU-induced lesion size measurement based on gross histological examination and image of bovine thigh in vitro 351
Kuo, I., see Wu, S.-J. 145
Kurz, J.H., Grosse, C.U. and Reinhardt, H.-W.
Strategies for reliable automatic onset time picking of acoustic emissions and of ultrasound signals in concrete 538

Lafeng, Y., see Wei, W. 69
Landa, M., see Seiner, H. 253
Lasserre, F., see Haïat, G. 619
Laude, V., see Wilm, M. 457
Laugier, P., see Meziri, M. 305
Laurell, T., see Lilliehorn, T. 293
Lee, C.-H., see Joo, H.-W. 13
Lee, J.G., see Kim, J.O. 531
Leeman, S., see Dantas, R.G. 405
Leonard, K.R. and Hinders, M.K.
Lamb wave tomography of pipe-like structures 574
Leroy, O., see Declercq, N.F. 279
Leroy, O., see Declercq, N.F. 505
Leroy, O., see Declercq, N.F. 605
Leroy, O., see Declercq, N.F. 764
Lewin, P.A., Mu, C., Umchid, S., Daryoush, A. and El-Sherif, M.
Acousto-optic, point receiver hydrophone probe for operation up to 100 MHz 815
Lhémery, A., see Haïat, G. 619
Lilliehorn, T., Simu, U., Nilsson, M., Almqvist, M., Stepinski, T., Laurell, T., Nilsson, J. and Johansson, S.
Trapping of microparticles in the near field of an ultrasonic transducer 293
Lin, C.-Y., see Ting, Y. 566
Lu, M.H., see Huang, Q.H. 153
Lu, Y. and Michaels, J.E.
A methodology for structural health monitoring with diffuse ultrasonic waves in the presence of temperature variations 717
Lysyansky, P., see Behar, V. 57

MacDonald, C.A., Sboros, V., Gomatam, J., Pye, S.D., Moran, C.M. and Norman McDicken, W.
A numerical investigation of the resonance of gas-filled microbubbles: resonance dependence on acoustic pressure amplitude 113
Madelin, G., Hosten, B., Biateau, C., Mougenot, C., Franconi, J.-M. and Thiaudière, E.
Comparison of laser interferometry and radiation force method of measuring ultrasonic power 769
Man, H.C., see Chiu, K.Y. 713
Martín-Fernández, M. and Alberola-López, C.
On low order moments of the homodyned-K distribution 283
Martin, R.W., see Vaezy, S. 265
Masegosa, P., see Buigas, M. 383
Mengli, W., see Changliang, X. 596
Meyer, S., see Goodenough, T.I.J. 165
Meyer, S., see Goodenough, T.I.J. 231
Meziri, M., Pereira, W.C.A., Abdelwahab, A., Degott, C. and Laugier, P.
In vitro chronic hepatic disease characterization with a multiparametric ultrasonic approach 305
Michaels, J.E., see Lu, Y. 717
Mistik, S.İ and Yükseloğlu, S.M.
Hydrogen peroxide bleaching of cotton in ultrasonic energy 811
Mitri, F.G. and Fatemi, M.
Dynamic acoustic radiation force acting on cylindrical shells: theory and simulations 435
Mitri, F.G.
Acoustic radiation force acting on elastic and viscoelastic spherical shells placed in a plane standing wave field 681
Mitri, F.G.
Frequency dependence of the acoustic radiation force acting on absorbing cylindrical shells 271
Mittal, G.S., see Zhao, B. 375
Montero de Espinosa, F., see Resa, P. 247
Moran, C.M., see MacDonald, C.A. 113
Motogi, S., see Biwa, S. 5
Mou, S.-C., see Wen, F.-L. 35
Mougenot, C., see Madelin, G. 769
Moysan, J., see Apfel, A. 447
Mu, C., see Lewin, P.A. 815

Neild, A., see Berriman, J. 211
Neild, A., Hutchins, D.A., Robertson, T.J., Davis, L.A.J. and Billson, D.R.
The radiated fields of focussing air-coupled ultrasonic phased arrays 183
Nemeth, S., see Komarov, S.V. 241
Nilsson, J., see Lilliehorn, T. 293
Nilsson, M., see Lilliehorn, T. 293
Norman McDicken, W., see MacDonald, C.A. 113

Ohno, N., see Biwa, S. 5
Ohno, N., see Biwa, S. 495
Ouaftouh, M., see Petit, S. 802
Ourak, M., see Petit, S. 802
Ouyang, M., see Wen, F.-L. 35

Pecorari, C.
A note on the sensitivity of SV wave scattering to surface-breaking cracks 508
Pereira, W.C.A., see Meziri, M. 305
Perelomova, A.
Heat generation by impulse ultrasound 95
Peterson, M.L., see Puckett, A.D. 197
Petit, S., Duquennoy, M., Ouaftouh, M., Deneuville, F., Ourak, M. and Desvaux, S.
Non-destructive testing of ceramic balls using high frequency ultrasonic resonance spectroscopy 802
Philippidis, T.P. and Aggelis, D.G.
Experimental study of wave dispersion and attenuation in concrete 584
Popovics, S.
Effects of uneven moisture distribution on the strength of and wave velocity in concrete 429
Povey, M., see Chow, R. 227
Povey, M.J.W., Stec, Z., Hindle, S.A., Kennedy, J.D. and Taylor, R.G.
Estimating organic chain length through sound velocity measurements 219
Predoi, M.V. and Rousseau, M.
Lamb waves propagation in elastic plane layers with a joint strip 551

Preston, R.C., see Gélat, P.N. 331
Preston, R.C., see Theobald, P.D. 343
Prêtre, D., see Goodenough, T.I.J. 165
Prêtre, D., see Goodenough, T.I.J. 231
Puckett, A.D. and Peterson, M.L.
A semi-analytical model for predicting multiple propagating axially symmetric modes in cylindrical waveguides 197
Purnell, P., see Berriman, J. 211
Pye, S.D., see MacDonald, C.A. 113

Qian, Z., Jin, F., Wang, Z. and Kishimoto, K.
Investigation of scattering of elastic waves by cylinders in 1–3 piezocomposites 822
Quek, S.T., see Jin, J. 481

Rajendram, V.S., see Goodenough, T.I.J. 165
Rajendram, V.S., see Goodenough, T.I.J. 231
Ramesh, R., Kara, H. and Bowen, C.R.
Finite element modelling of dense and porous piezoceramic disc hydrophones 173
Rebinsky, D.A., see Berezina, S. 87
Reinhardt, A., see Wilm, M. 457
Reinhardt, H.-W., see Kurz, J.H. 538
Resa, P., Elvira, L., Montero de Espinosa, F. and Gómez-Ullate, Y.
Ultrasonic velocity in water–ethanol–sucrose mixtures during alcoholic fermentation 247
Robertson, T.J., see Neild, A. 183
Rousseau, M., see Predoi, M.V. 551
Roy Mahapatra, D., Singhal, A. and Gopalakrishnan, S.
Lamb wave characteristics of thickness-graded piezoelectric IDT 736
Rus, G., Wooh, S.-C. and Gallego, R.
Design of ultrasonic wedge transducer 391

Saito, H., Sato, K., Yokota, K. and Endo, N.
A study on a micro mover driven by ultrasonic waves 524
Sarvazyan, A., see Tatarinov, A. 672
Sarvazyan, A., Tatarinov, A. and Sarvazyan, N.
Ultrasonic assessment of tissue hydration status 661
Sarvazyan, N., see Sarvazyan, A. 661
Sarvazyan, N., see Tatarinov, A. 672
Sato, K., see Saito, H. 524
Sboros, V., see MacDonald, C.A. 113
Schmitz, G., see Buigas, M. 383
Schneider, D., see Berezina, S. 87
Seemann, W., see Yi, Y. 629
Seiner, H. and Landa, M.
Sensitivity analysis of an inverse procedure for determination of elastic coefficients for strong anisotropy 253
Shi, W.T., see Forsberg, F. 79
Shung, K.K., see Wu, S.-J. 145
Shuyu, L.
Load characteristics of high power sandwich piezoelectric ultrasonic transducers 365
Simu, U., see Lilliehorn, T. 293
Singhal, A., see Roy Mahapatra, D. 736
Šlegrová, Z. and Bálek, R.
A comparison measurement of nonlinear ultrasonic waves in tubes by a microphone and by an optical interferometric probe 315
Starr, F., see Vaezy, S. 265
Stec, Z., see Povey, M.J.W. 219
Stepinski, T., see Lilliehorn, T. 293
Suzuki, A., see Biwa, S. 495

Tatarinov, A., see Sarvazyan, A. 661
Tatarinov, A., Sarvazyan, N. and Sarvazyan, A.
Use of multiple acoustic wave modes for assessment of long bones: Model study 672
Taylor, R.G., see Povey, M.J.W. 219
Theobald, P.D., Esward, T.J., Dowson, S.P. and Preston, R.C.
Acoustic emission transducers—development of a facility for traceable out-of-plane displacement calibration 343
Thiaudière, E., see Madelin, G. 769
Ting, Y., Jar, H.-C., Lin, C.-Y. and Huang, J.-S.
A new type of parts feeder driven by bimorph piezo actuator 566
Tsui, P.-H., Wang, S.-H. and Huang, C.-C.
In vitro effects of ultrasound with different energies on the conduction properties of neural tissue 560

Umchid, S., see Lewin, P.A. 815

Vaezy, S., see Vaezy, S. 265
Vaezy, S., Vaezy, S., Starr, F., Chi, E., Cornejo, C., Crum, L. and Martin, R.W.
Intra-operative acoustic hemostasis of liver: production of a homogenate for effective treatment 265
Vanhille, C. and Campos-Pozuelo, C.
Numerical and experimental analysis of strongly nonlinear standing acoustic waves in axisymmetric cavities 652

Wan, M., see Chen, X. 357
Wan, M., see Kun, G. 351
Wang, Q., see Jin, J. 481
Wang, S.-H., see Tsui, P.-H. 560
Wang, Z., see Qian, Z. 822
Watanabe, Y., see Biwa, S. 5
Wei, W., Zhengzhong, B., Yongjie, W., Lafeng, Y. and Yalin, M.
A novel approach to quantitative ultrasonic naked gene delivery and its non-invasive assessment 69
Wen, F.-L., Mou, S.-C. and Ouyang, M.
Design and construction of shaft-driving type piezoceramic ultrasonic motor 35
Willatzen, M. and Yan Voon, L.C.L.
Flow acoustics in periodic structures 756
Wilm, M., Reinhardt, A., Laude, V., Armati, R., Daniau, W. and Ballandras, S.
Three-dimensional modelling of micromachined-ultrasonic-transducer arrays operating in water 457
Winder, A.A., see Forsberg, F. 79
Wooh, S.-C., see Rus, G. 391
Wu, S.-J., Kuo, I. and Shung, K.K.
Boundary element simulation of backscattering properties for red blood with high frequency ultrasonic transducers 145

Yadav, A., see Yadava, S.S. 732
Yadava, S.S. and Yadav, A.
Ultrasonic study on binary liquid mixtures between some bromoalkanes and hydrocarbons 732
Yalin, M., see Wei, W. 69
Yan Voon, L.C.L., see Willatzen, M. 756
Yi, Y., Seemann, W., Gausmann, R. and Zhong, J.
Development and analysis of a longitudinal and torsional type ultrasonic motor with two stators 629
Yokota, K., see Saito, H. 524
Yongjie, W., see Wei, W. 69
Yükseloğlu, S.M., see Mistik, S.İ 811

Zaitsev, V.Yu., Gusev, V.E. and Zaytsev, Yu.V.
Mutually induced variations in dissipation and elasticity for oscillations in hysteretic materials: Non-simplex interaction regimes 699
Zaytsev, Yu.V., see Zaitsev, V.Yu. 699
Zeqiri, B., see Gélat, P.N. 321
Zhang, H., Zhang, S.-Y. and Zheng, K.
Parameter characterization of high-overtone bulk acoustic resonators by resonant spectrum method 635
Zhang, S.-Y., see Zhang, H. 635
Zhao, B., Basir, O.A. and Mittal, G.S.
Estimation of ultrasound attenuation and dispersion using short time Fourier transform 375
Zheng, K., see Zhang, H. 635
Zheng, Y.P., see Huang, Q.H. 153
Zhengzhong, B., see Wei, W. 69
Zhenxi, Z., see Hua, X. 399
Zhong, J., see Yi, Y. 629
Zinin, P.V., see Berezina, S. 87

Available online at www.sciencedirect.com
SCIENCE DIRECT®
Ultrasonics 43 (2005) 839–841
Ultrasonics
www.elsevier.com/locate/ultras

Subject Index to Volume 43

3D ultrasound imaging, 153

Absorption, 271, 681
Acoustic emission, 343, 538
Acoustic measurements, 547
Acoustic radiation force, 681
Acoustic scattering, 681
Acoustic streaming, 596
Acoustic viscous stress, 596
Acoustical heating, 95
Acoustics, 756
Acousto-optic sensors, 815
Acousto-optics, 315, 764
Adiabatic compressibility, 732
Air-coupled ultrasound, 211
Akaike Information Criterion, 538
Aluminum alloy, 692
Analytical model, 197
Anisotropy, 447
Aperture, 321
Array, 457
Arrays, 183
Asymptotic waveform evaluation, 13
Attenuation, 305, 375, 584
Attenuation coefficient, 101
Attenuation spectroscopy, 165, 231
Autocorrelation, 399
Automatic picker, 538
Axisymmetric resonators, 652

Bayesian classifier, 283
Bilaminar, 331
Bimorph piezoelectric actuator, 566
Binary liquid mixtures, 732
Boundary element method, 145
Boundary element method (BEM), 391
Bounded beams, 279
Bubble dynamics, 643

Calibration, 165, 343
Cardiac elastography, 57
Cavitation erosion, 713
Cladded material, 619
Class separability measures, 283
cMUT, 383
Complex harmonic waves, 764
Complex waves, 279
Composite, 429
Compound action potential, 560
Compressive strength, 429
Concrete, 211, 429, 584
Conduction velocity, 560
Conical transducer, 391
Contact interface, 495
Contrast agents, 113
Conventional bleaching, 811
Corrugated surfaces, 605, 764
Cotton, 811
Crack, 429, 508
Crack geometry, 481
Crack identification, 619
Cross-talk, 457
Cylindrical shell, 271
Cylindrical structures, 123
Cylindrical waveguide, 197

Defect detection, 237
Density, 247
Design sensitivity method, 13
Differential scheme, 5
Diffraction, 183, 605, 764
Diffuse ultrasonic waves, 717
Dispersion, 123, 584, 736
Dispersive, 197
Driving shaft, 49
Drug delivery, 69, 681
Drying, 429

Effective electromechanical coupling factor, 635
Elastic anisotropy, 253
Elastic constant determination, 123
Elastic property, 87
Elastic strip, 551
Elastic wave propagation, 197
Electro-acoustical characterization, 383
EMAT, 135
EMATs, 512
Equivalent scatterers, 405
Erosion rate, 713
Ethanol, 247
Experimental analysis, 652

Fascia lata, 351
FEM modelling, 747
Fermentation, 247
Fetal heart rate, 399
FGPM, 736
Fibre, 811
Figure of merit, 635
Filament-wound, 123
Finite element, 321
Finite element method, 13
Finite periodical inhomogeneous media, 547
Flow, 756
Focused ultrasonic transducer, 145
Focussing, 183
Fractional low order moments, 283
Freehand scanning, 153
Friction, 35
Friction reduction, 524

Gas-phase mass transfer, 241
Grating equation, 605
Group velocity, 253, 756

Harmonic imaging, 79
Heat, 505
Hemostasis, 265
Heterodyne interferometry, 769
Heterogeneity, 447
HIFU, 265, 351
High power sound wave, 241
High power ultrasonic transducer, 365
High resolution imaging, 237
High temperature, 241
High-overtone bulk acoustic resonator, 635
High-power ultrasound, 652
Hinkley criterion, 538
Histology, 351
Homodyned-K, 283
Hot upsetting, 692
Human teeth, 467
Hydration, 661
Hydrogen peroxide, 811
Hydrophones, 173
Hysteresis, 699

Ice, 227
IDT, 736
Image, 351
Image segmentation, 789
Image transformation, 57
Imaging, 512
Impulse ultrasound, 95
Impulse-response formalism, 421
Incubation period, 713
Induced dissipation, 699
Inertial cavitation, 643
Inhomogeneous waves, 279, 605, 764
Insoluble particles, 231

doi:10.1016/S0041-624X(05)00093-4

Interdigital transducer, 481
Interface wave, 495
Interfacial stiffness, 495
Interferometer, 343
Intermolecular forces, 219
Inverse problem, 123, 253, 619

Knitted fabric, 811

Lamb wave, 357, 481, 574, 736
Lamb waves, 551
Laser interferometer, 315
Laser-SAW technique, 87
Laser-ultrasound, 512
Lattice Boltzmann model, 21
Lesion size, 351
Liver, 265, 305
Load, 365
Longitudinal wave, 5

Material characterization, 357
Matrix method, 547
Meander-line structure, 566
Measurement, 343
Membrane hydrophone, 331
Micro mover, 524
Microbubble, 113
Microfluidic, 293
Micromachined ultrasonic transducer, 457
Micron particles, 21
Mobile double-sided, 481
Mode coupling, 1
Model-based inversion, 619
Modelling, 173
Modulus defect, 699
Moisture content, 429
Molecular velocity, 219
Motion estimation, 57
Multilayers, 135
Multiple mode, 197
Muscle, 661
Musculoskeletal body parts, 153

Natural frequency, 531
NDE strategy, 481
Near field, 293
Near-field, 183
NO removal, 241
Non-destructive evaluation, 253
Non-destructive testing, 447
Non-invashive assessment, 69
Non-linear oscillations, 643
Nondestructive evaluation (NDE), 822
Nondestructive testing, 619
Nonlinear dissipation, 699
Nonlinear flow, 95
Nonlinear standing waves, 652
Nonlinear waves, 315
Nonlinearity, 1
Nucleation, 227
Numerical modelling, 652

On-line health monitoring, 822
Onset detection, 538
Orthogonal frequency division, 777

Parametric characterization, 305
Parametric imaging, 789
Parametric model fitting, 123
Particles, 293
Particulate composite, 5
Periodic structures, 756
Perturbation of materials parameters, 822
Phase response, 331
Phase velocity, 101, 375
Physiotherapy transducer, 321
Piezoceramics, 173
Piezocomposites, 173
Piezoelectric, 293, 331
Piezoelectric composites with 1–3 connectivity, 822
Piezoelectric effect, 35
Piezoelectric transducer, 13
Piezoelectric transducers, 1
Piezoelectricity, 531, 747
Pipes, 574
Point source, 391
Point transducer, 391
Poly(methyl methacrylate), 495
Polymer–matrix composite, 5
Polymers, 219, 681
Porous structures, 173
Profilometry, 713
Pulse compression, 777
pvdf, 331
PZT, 293, 629

Rabbit, 265
Radial mode, 531
Radiation, 457
Radiation force, 271, 321
Radiation force balance, 769
Radiation pressure, 21
Rayleigh wave interactions, 512
Rayleigh waves, 605
Red blood cells, 145
Reflection ratio, 495
Resonance acoustic scattering, 822
Resonance frequencies, 635
Resonance frequency, 113, 365, 629
Rough surfaces, 605

Scatter matrices, 283
Scattering, 508
Scattering cross-section, 113
Scattering-object function, 421
Schlieren photography, 505
Scholte–Stoneley waves, 605
Sensitivity, 508
Sensitivity analysis, 253
Shaft-driving, 35
Shear wave, 508
Shells, 681
Short time Fourier transform, 375
Simulation, 21, 283
Single bubble, 227
Slave shaft, 49
Sonocrystallisation, 227
Sound absorption, 505
Sound speed, 305
Speckle, 405
Spherical transducer, 531
Spring constant, 596
Stability, 596, 736
Statistical estimation, 57
Stiffness ratio, 495
Stochastic optimization, 777
Structural health monitoring, 717
Subharmonic imaging, 79
Sucrose, 247
Sucrose solution, 227
Surface Brillouin spectroscopy, 87
Surface roughness, 713
Surface waves, 605
Suspensions, 101
Symmetry, 467
Synthetic aperture, 777

Temperature compensation, 717
Thermal analogy, 747
Thickness resonance spectra, 135
Thin film coating, 87
Thin layer, 357
Tissue characterisation, 789
Tomography, 574
Transducer, 343, 629
Transducer arrays, 79
Transducer design, 79
Transient waves, 764
Trap, 293
Trees, 237
Tubes, 315
Turbulent diffusivity, 241

Ultrafood, 165, 231
Ultrasonic, 357, 619
Ultrasonic bioeffect, 69
Ultrasonic clutch, 49
Ultrasonic Doppler, 399
Ultrasonic energy, 811
Ultrasonic imaging, 421, 789
Ultrasonic motor, 35, 596, 629
Ultrasonic motors, 747
Ultrasonic path length, 467
Ultrasonic power, 769
Ultrasonic reflection, 495
Ultrasonic transducer, 49
Ultrasonic Velocity, 247
Ultrasonic vibration, 49
Ultrasonic-vibration, 692
Ultrasonic wave, 524
Ultrasonics, 732
Ultrasound, 113, 293, 305, 315, 375, 447, 467, 538, 574, 643
Ultrasound contrast agent, 79
Ultrasound hydrophones, 815
Ultrasound naked gene delivery, 69
Ultrasound scattering, 405
Ultrasound simulation, 405
Ultrasound stimulation, 560

Ultrasound velocity, 661
Ultrasounds, 101
Underwater acoustics, 173

Velocity dispersion, 165
Velocity variations, 135
Vibration, 629
Vibration of mover, 524
Viscoelastic fluid, 643
Volume reconstruction, 153

Wall thickness, 467
Water, 247
Wave attenuation, 5
Wave interaction, 699
Wave phenomenon, 524
Wave propagation, 101, 123
Wave (pulse) velocity, 429
Weld, 447
Whiteness Index, 811
Wideband acousto-optic calibration techniques, 815
Wood, 237

Yarn, 811